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Ministry of Northern Development and Mines

Mines and Minerals Division

GEOLOGICAL DATA INVENTORY FOLIO
GDIF 547

MCCONNELL TOWNSHIP

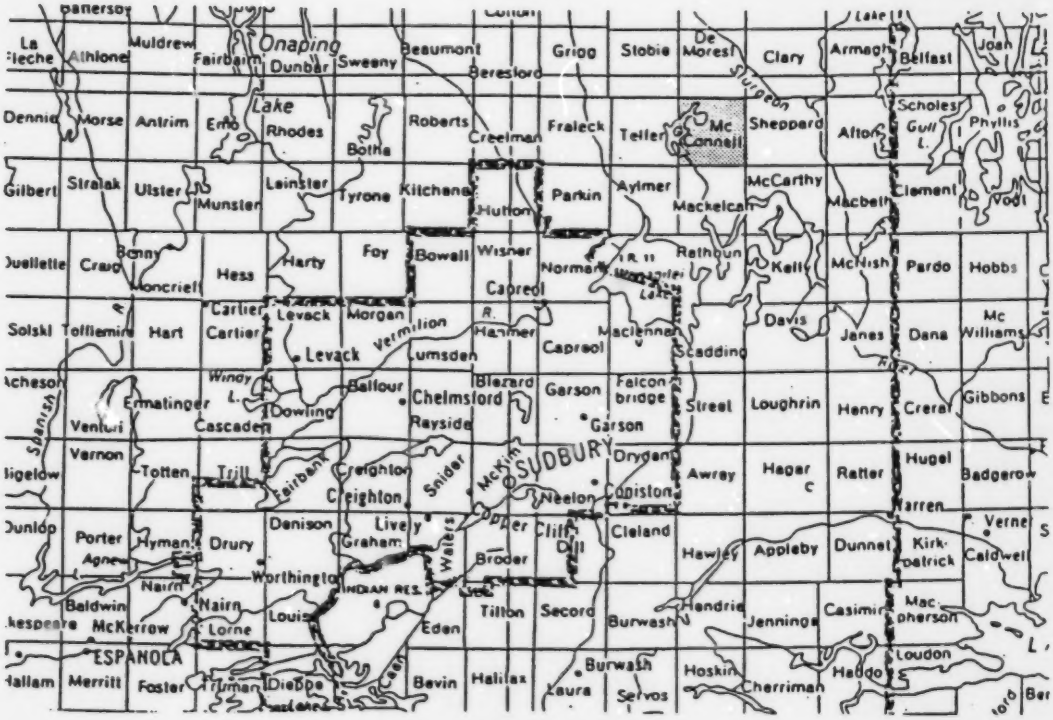
Sudbury Mining Division

41 I/15

Compiled by the staff of

the Resident Geologist's Office

SUDBURY



LOCATION MAP

CANADA ONTARIO
Mineral Development
Exploitation Minérale

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

Mining Claim Map Number G 4083

This project was funded under the Canada-Ontario Mineral Development Agreement (COMDA).

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1991. McConnell Township, Geological Data Inventory Folio 547; compiled by the staff of the Resident Geologist's office, Sudbury.

Original Compilation by: Jerome. Lucille, July 1989

Date	Page(s) Revised	Revised by
*		

Date	Page(s) Revised	Revised by

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ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) ..... Map A-1

B. Exploration Data Map (s) ..... Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P	Aggregate Resources Inventory Paper
Bull	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C.	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report

*

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no': if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	YES	L.J.
2	Assessment Files Research Office, Toronto	N.A.	L.J.
3	OGS/ODM General Index	YES	L.J.
4	Catalogue of Airborne Geophysical Surveys (ODM)	NO	L.J.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	NO	L.J.
6	ODM Industrial Mineral Reports	NO	L.J.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	N.A.	L.J.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	NO	L.J.
9	Newspaper Clippings File	NO	L.J.
10	GSC Index to Publications	NO	L.J.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	YES	L.J.
12	OGS Index Maps	YES	L.J.
13	Source Mineral Deposit Records (OGS)	NO	L.J.
14	Author - Subject Articles File	YES	L.J.
15	ODM/OGS Miscellaneous Papers	YES	L.J.
16	ODM Geological Circulars	NO	L.J.
17	OGS Study Series	NO	L.J.
18	ODM Preliminary Reports	NO	L.J.
19	ODM Bulletins	NO	L.J.
20	ODM/OGS Open File Reports	YES	L.J.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	YES	L.J.
22	OGS Aggregate Resources Inventory Papers	NO	L.J.
23	OGS Mineral Potential Maps	YES	L.J.
24	Drill Core Library Catalogue	N.A.	L.J.
25	Theses on File, Sudbury	NO	L.J.
*			

McCONNELL TOWNSHIP

MINERAL COMMODITIES REFERENCE LIST

anh ..... Anhydrite
ank ..... Ankerite
ap ..... Apatite
arg ..... Argentite
As ..... Arsenic
asp ..... Arsenopyrite
asb ..... Asbestos
ba ..... Barite
be ..... Beryl
Bi ..... Bismuth
bn ..... Bornite
Cd ..... Cadmium
calc ..... Calcite
carb ..... Carbonate
cc ..... Chalcocite
cp ..... Chalcopyrite
ch ..... Chert
clay ..... Clay
Co ..... Cobalt
cob ..... Cobaltite
▲Cu ..... Copper
cor ..... Corundum
dol ..... Dolomite
ep ..... Epidote
fel ..... Feldspar
fl ..... Fluorite (flurospar)
fu. ..... Fuchsite
gn. ..... Galena
gt. ..... Garnet
goe ..... Goethite
▲Au ..... Gold
gf ..... Graphite

gl ..... Gravel
gyp ..... Gypsum
hem ..... Hematite
Fe ..... Iron
IF ..... Iron Formation
jas ..... Jasper
ky ..... Kyanite
▲Pb ..... Lead
lim ..... Limonite
Li ..... Lithium
mgst ..... Magnesite
mag ..... Magnetite
mc ..... Malachite
Mn ..... Manganese
mb ..... Marble
mar ..... Marcasite
ma ..... Marl
mi ..... Mica
mo ..... Molybdenite
Mo ..... Molybdenum
mon ..... Monazite
ne .... Nephelite (nepheline)
Ni ..... Nickel
Nb ..... Niobium
Pd ..... Palladium
pent ..... Pentlandite
Pt ..... Platinum
py ..... Pyrite
pyl ..... Pyrochlore
po ..... Pyrrhotite
q ..... Quartz
qcv .. Quartz carbonate vein

ra ..... Radioactive minerals
RE ..... Rare Earths
sd ..... Sand
sgl ..... Sand and gravel
ss ..... Sandstone
scap ..... Scapolite
shee ..... Scheelite
serp ..... Serpentine
sh ..... Shale
sid ..... Siderite
si ..... Silica
▲Ag ..... Silver
sl ..... Slate
sm ..... Smaltite
sod ..... Sodalite
spec ..... Specularite
sp ..... Sphalerite
spd ..... Spodumene
s ..... Sulphides
talc ..... Talc
Te ..... Tellurium
th ..... Thorite
Th ..... Thorium
ti ..... Titanite
Ti ..... Titanium
tour ..... Tourmaline
W ..... Tungsten
uran ..... Uraninite
U ..... Uranium
verm ..... Vermiculite
Zn ..... Zinc
zr ..... Zircon

ADDITIONS

*

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

MINERAL OCCURRENCES			Source Min. Dep. Record	References in OGS Min. Dep. Cir. and Indus. Mineral Rpts.	Additional References and/or Remarks
Map Ref. Letter	(see Data Map) Name(s)	Mineralization			
A	Canadian Nickel Co. Ltd. (RX44417)	Au			McConnell 0010
B	Canadian Nickel Co. Ltd. (RX44424)	Au			McConnell 0010
C	Canadian Nickel Co. Ltd. (RX44422)	Au			McConnell 0010
D	Laura Lake Occurrence, Canadian Nickel Co. Ltd.	Cu, Pb, Au, Ag			McConnell 0010

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																			
										Airborne			Ground							
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp		Mag	EM	Rad	Mag	EM	Rad	IP	Self Potential	Resistivity	Other Data		or footnotes
1	Canadian Nickel Co. Ltd. (Clary 0011)	79																			
2	Canadian Nickel Co. Ltd. (McConnell 0010)	81				81															
3	Ateba Mines Inc. (Aylmer 0017)	81																			
4	Ateba Mines Inc., Canadian Occidental Petroleum (Aylmer 0013-A1)									81	81										
5	Lynx Canada Explorations, Canadian Occidental Petroleum (McConnell 0011)	81																			
6	Ateba Mines Inc. (McConnell 0012)									81	81	81									

SEE PAGE 13-1,...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY									
Map Drill Loc. No.	Company Name	Company Drillhole Number	Date Drill-ed	Bearing and Azimuth	Init. Dip of Hole	Over-burden Thick-ness	Hole Length	Log Mineraliza-tion	Assay data in log

Map Index No.	AIRBORNE GEOPHYSICAL SURVEY DATA		Flight Altitude	Flight Line Direct.	Flight Line Spacing
	-by -for -year	Type of Survey			
4	1981: Kenting Earth Sciences Ltd. for Canadian Occidental Petroleum Ltd.	a. Magnetometer b. VLF Electromagnetometer	150' - 200'	N/S, E/W	1320'
6	1981: Kenting Earth Sciences Ltd. for Ateba Mines Ltd.	a. Magnetometer b. VLF Electromagnetometer	150' - 200'	N/S, E/W	1320'

Map Site No.	GEOCHEMICAL SURVEY DATA		By	Reference(s)
	Type of survey	Analysis for		

Map Site No.	GEOCHRONOLOGY DATA - AGE DATING			
	Method	Material	Reference	Result

AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologist Office

(a) Aerial Photographs

Year	Roll	Line	Numbers
1977	11	4640	20-26
	79	4640	125-128
	79	4639	172-178
	79	4638	205-211
	79	4637	229-235

(b) Photomosaics

(c) Satellite Imagery

TOPOGRAPHIC MAPS (selected)			
Scale	Year	Name and/or Number	By
1:50,000	1975	Milnet Sheet, 41I/15	EMR
1:100,000	1980	NOEGTS Data Base Map, Capreol, Map 5001, NOEGT Study 95, Capreol	OGS, Gartner, J.F.

NEWSPAPER CLIPPINGS FILE			
PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

ATEBA MINES INC.
CANADIAN NICKEL CO. LTD.
CANADIAN OCCIDENTAL PETROLEUM LTD.
CHINIGUCHI LAKE
EVELYN LAKE
LAURA LAKE
LYNX CANADA EXPLORATIONS LTD.
MCCONNELL TOWNSHIP
RAWSON LAKE

Index Volume	Listing:	Report Volume	Part	Page
1	Laura Lake			
	McConnell Tp.			
	Rocks, timber	N.O.		84
		N.O.		99
3	Canadian Nickel Co. Ltd.			
	Incorporated	46	1	59
9	McConnell, Telfer & Demorest Tps., Sudbury Dist.			
	Summary of field work, 1979 by B. Dressler	MP90		76-78

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
GDH Consultants	0	Sudbury Research Project	Map 4	1"=1/2 mi.
Thomson, J. E.	1960	Uranium and Thorium Deposits at the Base of the Huronian System in the District of Sudbury	GR1	
ODM-GSC	1965	Aeromagnetic Map, Sudbury	7067G	1"=4 mi.
ODM-GSC	1965	Aeromagnetic Map, Milnet	1512G	1"=1 mi.
Meyn, H. D.	1966	Capreol Sheet	ODM Map P367	1"=2 mi.
Boissonneau, A. N.	1968	Glacial History of Northwestern Ontario II. The Timiskaming Algoma Area	CJES Vol. 5, No. 1	pp. 97-109
Hadley, D. G.	1968	The Sedimentology of the Huronian Formation, Ontario and Quebec, Canada, Ph. D., John Hopkins University	Sudbury Thesis File	

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Lindsey, D. A.	1969	Glacial Sedimentology of the Precambrian Gowganda Formation, Ontario, Canada	GSA Bull., Vol. 80, No. 9	pp. 1685-1702
Card, K. D., Lumbers, S. B.	1975	Sudbury-Cobalt Geological Compilation Map	OGS Map 2361	1"=4 mi.
OGS-GSC	1976	Uranium Reconnaissance Program Airborne Gamma Ray Spectrometer Survey	Map P1610	1: 250,000
Springer, J.	1977	Ontario Mineral Potential, Northern Part of Sudbury Sheet and Part of North Bay Sheet	OGS Map P1512	1: 250,000
Dressler, B. O., Cass, J., Kerr, C.	1980	Chiniguchi Lake Area, McConnell Township	OGS Map P2349	1"=1/4 mi.
Dressler, B. O.	1981	Otter Lake, Sudbury District	OGS Map 2450	1"=1/2 mi.
Dressler, B. O.	1981	Geology of the Chiniguchi Lake Area, Demorest, McConnell and Telfer Townships	OFR 5347	

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Gupta, V. K.	1981	Bouguer Gravity and Generalized Geological Map of the Sudbury-Onaping Lake Area	OGS Map P2482	1: 100,000
Young, G. M.	1981	The Early Proterozoic Gowganda Formation, Ontario, Canada. Earth's Pre-Pleistocene Record.	Cambridge University Press	pp. 807-812
Adlington, R.	1982	McConnell Township, Sudbury Data Series	OGS Map P. 2459	1"=1/4 mi.
Dressler, B. O.	1982	Geology of the Wanapitei Lake Area	OGS Report 213	
Dressler, B. O.	1986	Geology of the Chiniguchi Lake Area	OGS Report 242, Map 2468	1"=1/2 mi.

Note #	NOTES
1	CANADIAN OCCIDENTAL PETROLEUM In 1979, Canadian Nickel Company Ltd. in a joint venture partnership with three other companies commenced an exploration program for uranium and gold mineralization at or near the base of the Huronian sequence in an area north of Lake Wanapitei. Reconnaissance geology and geophysics were done prior to drilling three deep boreholes in the program area. Other geophysical surveys such as radiometric, electromagnetic resistivity and spectrometric were performed on the drill core and on the property (Clary 0011). In 1981, Canadian Occidental Petroleum Ltd. along with three other exploration companies had a combined airborne magnetometer and VLF electromagnetometer survey flown over their group(s) of claims. The survey covered claims in four adjoining townships. The same work is compiled in files Aylmer 0013-A1, Mackelcan 0016, Mackelcan 0015, Mackelcan 0012 and McConnell 0011.

ADDENDA

ADDENDA

CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	6.451 6	cm^2
1 m^2	10.763 9	square feet	1 square foot	0.092 903 04	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	16.387 064	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

For further information please contact:

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McCONNELL TOWNSHIP

MAP LEGENDS

A. FILES INDEX MAP

FILE AREAS **See pages 4-1,2 .... of text**

- Reference number is always inside work area outlined. See listing in text pages.
- Small area of exploration data
- File covers whole township or area

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2__ of text

- Mineral occurrence at surface, with reference letter
- Mineral occurrence with shaft, depth given with reference letter
- Mineral occurrence reported but exact location uncertain, with reference letter
- Mineralized float with reference letter
- Mineral occurrence encountered in drilling, with reference letter

DRILLHOLES: See pages 5-1,2__ of text

- Location of single drillhole, with reference number
- Location of group of closely spaced drillholes, with reference number
- Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area, with reference number
- Property with drillholes which have not been plotted on map, with reference number
- Reverse circulation drillhole; churn drilling, with reference number

GEOCHEMICAL: See pages 7-1,2....of text

- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number

GEOPHYSICAL ANOMALIES

Airborne Surveys: See pages 6-1,2__ of text

- AM — Airborne magnetic anomaly
- Airborne electromagnetic anomaly Length of anomaly along flight line
- Airborne electromagnetic anomaly Location of anomaly along flight line
- Airborne electromagnetic anomaly Conductor axis: definite, probable, possible
- AEM — Airborne electromagnetic anomaly Conductor axis: Location of flight lines uncertain
- ARA — Airborne radiometric anomaly

Ground Surveys

- M — Ground magnetic anomaly
- VL — Ground electromagnetic anomaly (VL - Vertical loop; HL - Horizontal loop VLF - Very low freq.; Turam; JEM - Crone Em - 16)
- RA — Ground radiometric anomaly
- IP — Induced polarization anomaly
- SP — Self potential anomaly
- AFMAG — Audio-frequency magnetic anomaly (total intensity)
- R — Resistivity anomaly
- GR — Gravity anomaly

GEOCHRONOLOGICAL DATA: See page 8 of text

- Age dating material sampling site, with reference number

MISCELLANEOUS DATA

- Trenching, pit
- Rock quarry
- Adit
- Open pit
- Sand and/or gravel pit

MAPS
NOT
FILMED

CARTES
OMISES